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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/891,509 | 06/27/2001 | Mikko Puuskari | P 281472 2990408US/VK/KP | 8780 |
| 909 | 7590 08/08/2005 | 08/08/2005 EXAMINER | | |
| PILLSBURY WINTHROP SHAW PITTMAN, LLP | | | JAGANNATHAN, MELANIE | |
| P.O. BOX 10500 MCLEAN, VA 22102 | | | ART UNIT | PAPER NUMBER |
| | | | 2666 | · ···· |
| | | | DATE MAILED: 08/08/2005 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | |
|--|----------------------|-----------------------------|--|--|--|
| | 09/891,509 | PUUSKARI ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Melanie Jagannathan | 2666 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on <u>4/27/2005</u> . | | | | | |
| • | action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | |
| 4) ⊠ Claim(s) 1-23 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1,3-14 and 17-23 is/are rejected. 7) ⊠ Claim(s) 15 and 16 is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date | | | | | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | | atent Application (PTO-152) | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1,3-14,17-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Forslow US 6,608,832.

Regarding claims 1, 6, 18, the claimed method comprising sending data packets in a first plurality of data flows in the first communication subsystem and the claimed mapping the first plurality of data flows to a second plurality of data flows in second communication subsystem is disclosed by GGSN (Figure 9, element 116) with mapper for QoS mapping function per individual application flows, plural application flows communicated between an external network entity like ISP and mobile station. The claimed establishing at least one filter for controlling the mapping, associating the at least one filter with a data flow within the second plurality and mapping flow on the basis of filter is disclosed by mobile station initiating packet data protocol context activation to register, HLR stores a PDP context for each mobile subscriber in corresponding subscription records including subscribed quality of service profiles/parameters, Msid such as IMSI. One or more application flows such as video application flows, audio application flows or conferencing application flows can be established

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for a single PDP context. See column 3, lines 35-67, column 4, lines 1-8, 61-67, column 5, lines 1-33, column 9, lines 1-37, 66-67, column 10, lines 1-8, column 11, lines 56-62.

Regarding claims 3, 9, 20-21, the claimed configuring the filter from the second network element and claimed configuring the filter in a packet radio network employing packet radio protocol context activation is disclosed by mobile station initiating packet data protocol context activation to register, HLR stores a PDP context for each mobile subscriber in corresponding subscription records including subscribed quality of service profiles/parameters, Msid such as IMSI. One or more application flows such as video application flows, audio application flows or conferencing application flows can be established for a single PDP context.

Regarding claims 4-5, 10-12, the claimed configuring at least two filters in one PDP context activation and identifying each filter with a distinct identifier is disclosed by one or more application flows such as video application flows, audio application flows or conferencing application flows can be established for a single PDP context based on MSid such as IMSI etc. and also quality of service for each individual application flow can be established. See column 5, lines 22-33.

Regarding claims 7,8, the claimed IP network is disclosed by IP data network (Figure 2, element 56) and claimed allocating one IP address which is shared by all data flows within the second plurality and claimed allocating a separate IP address to each data flow is disclosed by one or more application flows can be established for a single PDP context.

Regarding claims 13-14, the claimed performing mapping on the basis of a filter to data flows conveying real-time information is disclosed by real time application like telephony requiring a guaranteed, low delay service with some applications having plural application flows

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with quality of service defined for each individual application flow. See column 3, lines 35-67, column 4, lines 1-8, 61-67, column 5, lines 1-33, column 9, lines 1-37, 66-67, column 10, lines 1-8, column 11, lines 56-62. The claimed default parameters is disclosed by individual application flows are associated with a quality of service class but a predefined new service class may be associated with an individual application flow and all of the packets within that flow are processed according to that quality of service class. See column 12, lines 35-55.

Regarding claim 17, the claimed at least one data flow tunneled over and at least two data flows within the second plurality have mutually different quality of service characteristics is disclosed by each PDP context may have plural application flows with quality of service parameters for each flow. See column 5, lines 10-21, column 10, and lines 2-3.

Regarding claims 19,23, the claimed first network element for routing data packets, being adapted to receive data packets in a first plurality of data flows is disclosed by GGSN receiving application flows from mobile station (Figure 9, element 102). See column 14, lines 51-67, column 15, lines 1-9. The claimed map the first plurality of second plurality of flows in second subsystem is disclosed by GGSN (element 116) including mapper (element 128) performing link layer selection and QoS mapping functions per individual application flows. See column 14, lines 26-62, column 15, lines 10-14, lines 56-65. The claimed establish at least one filter for controlling mapping, associate filter with data flow within the second plurality and map at least one data flow on basis of filter is disclosed by mobile application flows having a quality of service associated with it recognized on the IP layer. Individual application flows may specify and reserve beforehand IP level of quality of service desired (QoS Map Routine, Figure 8, block 70). See column 11, lines 56-67, column 12, lines 35-46. GGSN (element 116) including

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mapper (element 128) performing link layer selection and QoS mapping functions per individual application flows. The claimed receive a mobile station generated signal for configuring the filter, configure filter on basis of signal is disclosed by resource reservation approach, where mobile station can request one or more quality of service parameters for one or more individual application flows. The requested parameters for each application flow are mapped to bearer parameters of selected bearer. See column 10, lines 2-18.

Allowable Subject Matter

3. Claims 15-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Prior art of record does not disclose, in single or in combination, at least one of the data flows being bi-directional having first direction and second direction inverse to the first direction where at least one filter is modified on the basis of packets sent in the second direction.

Response to Arguments

4. Applicant's arguments filed 4/27/2005 have been fully considered but they are not persuasive.

Applicant argues Forslow does not teach claimed limitation of configuring the filter from a second network element. Examiner contends Forslow discloses that in order for a mobile station to communicate with an Internet service provider, the mobile station must establish

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communications with the mobile communications network. The mobile station initiates a packet data protocol context activation to register with the mobile communications system and begin a data session. The HLR stores a PDP context activation for each mobile subscriber including QoS profiles/parameters, IMSI etc and when a mobile station attaches to the GPRS network, the mobile station's subscription record is retrieved from the HLR. Examiner interprets this as teaching the idea of a filter (HLR) configured from a second network element (all mobile stations PDP context's are stored). See column 9, lines 1-37.

With regards to claims 19-21, Applicant argues Forslow does not disclose amended limitation receive a mobile station generated digital configuration signal and to configure a filter on the basis of mobile station generated digital configuration signal which comprises information which at least partially defines a filter for controlling mapping of data flows from external communication subsystem to packet radio network by support node. Examiner contends Forslow discloses the mobile station initiates a packet data protocol context activation to register with the mobile communications system and begin a data session. The HLR stores a PDP context activation for each mobile subscriber including QoS profiles/parameters, IMSI etc and when a mobile station attaches to the GPRS network, the mobile station's subscription record is retrieved from the HLR. See column 9, lines 1-37.

Applicant argues Forslow merely teaches PDP subscription record(s) of a mobile station are retrieved from home location register instead of a second network element. Thus Forslow fails to disclose configuring a filter from a second network element i.e. the network element that the data packets are sent to which is a mobile station. Examiner contends recitation of retrieving PDP subscription records or any other information from a second network element is not

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disclosed in present invention's claims. Examiner believes the mobile station initiating a packet data protocol context activation to register with the mobile communications system and to begin a data session reads on configuring a filter from a second network element since the HLR stores a PDP context activation for each mobile subscriber including QoS profiles/parameters, IMSI etc. Additionally, dependent claim 3, for instance, limits configuring the filter from a second network element in claim 1 with configuring the filter in a packet data protocol context activation message. See column 9, lines 1-37.

Therefore, rejection is maintained.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Jagannathan whose telephone number is 571-272-3163. The examiner can normally be reached on Monday-Friday from 8:00 a.m.-4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJ

CANG TON PRIMARY EXAMINER